### lowa



 Basin Boundaries (USGS 6-Digit Hydrologic Unit)

Partially Supporting

Not Supporting

This map depicts aquatic life use support status.

For a copy of the lowa 1996 305(b) report, contact:

#### John Olson

Iowa Department of Natural Resources Water Resources Section 900 East Grand Avenue Wallace State Office Building Des Moines, IA 50319 (515) 281-8905

### **Surface Water Quality**

Modifications to stream habitat and hydrology, sediment and plant nutrients, and natural conditions (such as shallowness in lakes) impair aquatic life uses in 34% of the surveyed rivers and over 35% of the surveyed lakes. Swimming use is impaired in 76% of the 862 surveyed river miles and 27% of the surveyed lakes, ponds, and reservoirs. Saylorville, Coralville, and Rathbun reservoirs have good water quality that fully supports all designated uses, but siltation severely

impacts Red Rock Reservoir. Point sources still pollute about 5% of the surveyed stream miles and two lakes.

#### **Ground Water Quality**

Groundwater supplies about 80% of all lowa's drinking water. Agricultural chemicals, underground storage tanks, agricultural drainage wells, livestock wastes, and improper management of hazardous substances all contribute to some degree of ground water contamination in Iowa. Several studies have detected low levels of common agricultural pesticides and synthetic organic compounds, such as solvents and degreasers, in both untreated and treated ground water. In most cases, the contaminants appear in small concentrations thought to pose no immediate threat to public health, but little is known about the health effects of long-term exposure to low concentrations of these chemicals.

# Programs to Restore Water Quality

In 1979, lowa began implementing its agricultural nonpoint strategy with education projects and cost-share programs to control sediment, the greatest pollutant, by volume, in the State. Later, lowa adopted rules that require that land disposal of animal wastes not contaminate surface and ground waters. Landfill rules establish specific siting, design, operation, and monitoring criteria and require annual

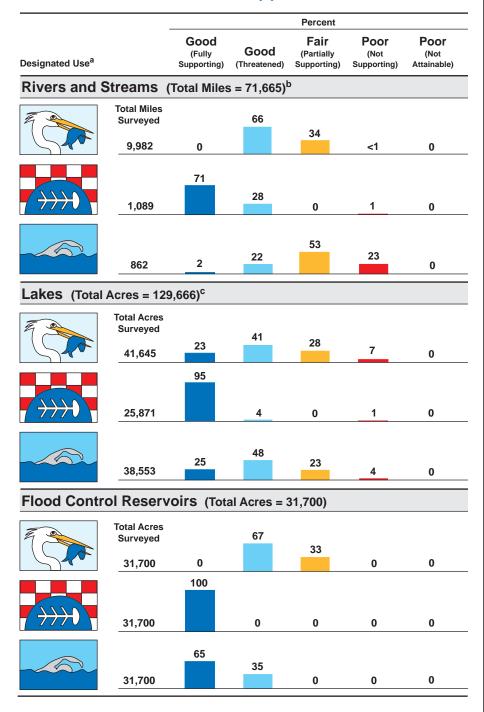
inspections and permit renewals every 3 years. Iowa also regulates construction in floodplains to limit soil erosion and impacts on aquatic life.

## Programs to Assess Water Quality

lowa's DNR maintains a fixed sampling network and conducts special intensive surveys at selected sites. The State routinely monitors metals, ammonia, and residual chlorine at the fixed sampling sites. Limited sampling for agricultural pesticides began as part of the fixed network in October 1995. Pesticides are also monitored for special studies examining the fate of pesticides in lowa rivers and levels of pesticides in water supply reservoirs. Limited monitoring for toxics in sediment was conducted as part of a special study of PCB contamination in the Mississippi River. Routine sampling has not included biological sampling in the past, but the role of biological sampling continues to grow. A program to develop biologically based water quality criteria for sampling for wadeable streams in each of lowa's ecoregions began in 1994 and continues.

Note: Figures may not add to 100% due to rounding.

#### Individual Use Support in Iowa



<sup>&</sup>lt;sup>a</sup> A subset of Iowa's designated uses appear in this figure. Refer to the State's 305(b) report for

a full description of the State's uses.

blincludes nonperennial streams that dry up and do not flow all year.

<sup>&</sup>lt;sup>c</sup> Excludes flood control reservoirs.